UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,814	11/25/2003	Farid Adrangi	042390.P17494	8004

45209 7590 09/18/2008

INTEL/BSTZ
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
STEPHEN, EMEM O	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
09/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,814	ADRANGI ET AL.	
	Examiner	Art Unit	
	EMEM STEPHEN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9 and 11-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9 and 11-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3-9, and 11-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-6, 7, 9, 11-15, and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 20030224855 A1 to Cunningham in view of U S Patent No. 7,096,273 B1 to Meier.

Regarding claim 1, Cunningham discloses a method of dynamically detecting a location of a mobile node, comprising: accessing static information pertaining to the mobile node from a configuration database (pars 35-36, and par. 58 lines 26-27); accessing dynamic information pertaining to the mobile node when the mobile node starts up (pars. 32-35, 58 lines 21-25, and par. 63); examining the static information and dynamic information pertaining to the mobile node (par. 58); selecting one of a plurality of location modules based on the static information and the dynamic information, the location module comprising an appropriate methodology to dynamically determine the mobile node's location (pars. 32-36, and 59).

However, Cunningham fails to disclose determine the mobile node's location with respect a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module to determine whether the mobile node is on an intranet network or an external separated from the intranet by the DMZ.

In a similar endeavor, Meier discloses determine the mobile node's location with respect a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ (see fig. 1, 123, col. 3 lines 36-43, and col. 6 lines 37-38), and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node (col. 4 line 50-col. 6 line 15), or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module to determine whether the mobile node is on an intranet network or an external network separated from the intranet by the DMZ (fig. 2 step 203, col. 2 lines 16-27, and col. 5 lines 35-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining determine the mobile node's location with respect a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module to determine the mobile node location.

Regarding claim 9, Cunningham discloses an article comprising a machine-accessible medium having stored thereon instructions that, when executed by a mobile node (pars. 55), cause the mobile node to: access static information pertaining to the mobile node from a configuration database (par. 58 lines 26-27); access dynamic

information pertaining to the mobile node when the mobile node starts up (par. 58 lines 21-25, and 63); examining the static information and dynamic information pertaining to the mobile node (par. 58); select one a plurality of location modules based on the static information and the dynamic information, each of the plurality of location modules comprising an appropriate methodology to dynamically determine the mobile node's location; and executing the location module to determine location of mobile node (pars. 32-35, and 59).

However, Cunningham fails to disclose determine the mobile node's location with respect a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module to determine whether the mobile node is on an intranet network or an external separated from the intranet by the DMZ.

In a similar endeavor, Meier discloses determining the mobile node's location with respect to a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ(see fig. 1, 123, and col. 3 lines 36-43), and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node(col. 4 line 50-col. 6 line 15), or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module

to determine whether the mobile node is on an intranet network (HA) or an external network (VA) separated from the intranet by the DMZ (fig. 2 step 203, and col. 2 lines 16-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining determine the mobile node's location with respect a corporate demilitarized zone wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node; and executing the location module for an accurate determination of the mobile node location.

Regarding claim 17, Cunningham discloses a mobile node capable of dynamically determining its location (see figure 5), comprising: a memory capable of storing a configuration database containing static information pertaining to the mobile node (pars. 47-52), the memory further capable of storing dynamic information obtained when the mobile node starts up (pars. 10, and 38); and a processor capable of executing an appropriate location module selected by a policy engine (par. 55, i.e. position determination module 515, microprocessor 525), the appropriate location module selected by the policy engine based on the static information and the dynamic information, the location module comprising an appropriate methodology to dynamically determine the mobile node's location (pars. 58-59).

However, Cunningham fails to disclose determine the mobile node's location with respect to a corporate demilitarized zone separating an internet from an external network wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node.

In a similar endeavor, Meier discloses determine the mobile node's location with respect to a corporate demilitarized zone separating an internet from an external network wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ(see fig. 1, 123, and col. 3 lines 36-43), and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node (col. 4 line 50-col. 6 line 15), or a third location module to utilize a care of address assigned by a DHCP server to determine the location of the mobile node (fig. 2 step 203, and col. 2 lines 16-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Cunningham by determining determine the mobile node's location with respect to a corporate demilitarized zone separating an internet from an external network wherein the plurality of location modules include a first location module for frequent roaming across the corporate DMZ, and a second location module to utilize a Dynamic Host Control Protocol reply to determine the location of the mobile node, or a third location module to utilize a care of address assigned by a DHCP

server to determine the location of the mobile node for the purpose of detecting position of the mobile devices for registration.

Regarding claims 3-6, 11-14, and 18-22, the combination of Cunningham and Meier discloses the method, an article, and a mobile node according to claims 1, 9, and 17 further comprising deciding whether to retain the location module based on the dynamic information (Cunningham, pars. 32-34); wherein deciding whether to retain the location module further comprises selecting an alternate location module if the dynamic information indicates the alternate location module is more suitable (Cunningham pars. 55-56); wherein applying the location module further comprises causing the mobile node to execute instructions in the location module; wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to register with an internal home agent and an external home agent (Cunningham see fig. 6); wherein the processor is further capable of causing the policy module to select a first location module based on the static information in the configuration database (Cunningham pars. 35-36), and wherein the processor is further capable of causing the policy engine to determine whether to retain the first location module (Cunningham, see figure 6, and pars. 55-58).

Regarding claims 7, 15, and 23, the combination of Cunningham and Meier discloses the method according to claim 5, wherein causing the mobile node to execute instructions in the location module further comprises examining a Dynamic Host Control Protocol reply to determine a domain name (Meier, col. 7 lines 1-20).

6. Claims 8, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Meier, and further in view of U. S. Publication No. 2006/0018296 A1 to Mukaoka et al..

Regarding claims 8, 16, and 24, the combination of Cunningham and Meier discloses the method according to claim 5, however, the combination fails to disclose wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to compare its care of address ("COA") against a CIDR block address in a configuration database.

Mukaoka et al. discloses compare its care of address ("COA") against a CIDR block address in a configuration database (pars. 0125-128).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, by comparing the address ("COA") against a CIDR block address in a configuration database as disclosed by Mukaoka et al. for the purpose of updating the database.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM STEPHEN whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571 272 7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ES
09/06/2008

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617